About the Booklet

After the accident at Tokyo Electric Power Company (TEPCO)’s Fukushima Daiichi Nuclear Power Station in March 2011, the reconstruction and recovery has been steadily progressing. The Ministry of the Environment has collected and compiled basic knowledge on radiation, and scientific expertise and initiatives of relevant ministries and agencies concerning health effects of radiation. The ministry has prepared a booklet to provide basic information since 2012, together with the National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology.

We have publicized the English version of the booklet, so that foreign nationals residing in Japan or visiting Japan or those interested in Japan can obtain basic knowledge on health effects of radiation and correctly understand changes in circumstances and efforts being made in Japan.

We hope that this booklet will be utilized in diverse occasions.

Contents

Includes approx. 350 pages

- **01 Basic Knowledge on Radiation**
  - Radioactivity and radiation; Basic knowledge on radioactive materials and their half-lives; Types of radiation; Penetrating power of radiation

- **02 Radiation Exposure**
  - Exposure routes and types of exposure; Units of radiation and measurement and calculation methods; Various types of radiation around us

- **03 Health Effects of Radiation**
  - Radiation effects on human body and mechanism; Effects on fetuses; Hereditary effects; Relation with cancer and leukemia; Psychological effects

- **04 Concept of Radiological Protection**
  - Basic knowledge on radiological protection and ideas on dose limits; Reduction of exposure doses; Understanding of long-term effects on the environment

- **05 Assessments by international Organizations**
  - Outline of assessments by international organizations, including the WHO and the UNSCEAR

- **06 Situation concerning the Accident**
  - Situation and outline of the accident; Efforts for decommissioning and other situations concerning the accident at TEPCO’s Fukushima Daiichi NPS

- **07 Environmental Monitoring**
  - Airborne monitoring and monitoring of farmland, forests, well water, clean water and ocean; Deposition of radioactive materials

- **08 Radioactive Materials in Foods**
  - Efforts for and concepts on inspection planning and distribution restrictions; Inspection results and measures for radioactive materials in foods

- **09 Efforts toward Recovery from the Accident**
  - Decontamination and interim storage of removed soil; Temporary storage and disposal of waste; Activities in areas under evacuation orders

- **10 Health Management**
  - Outline of the Fukushima Health Management Survey and details of the Basic Survey and Detailed Surveys